

REMARKS

Entry of the amendments is respectfully requested. Claims 1 and 20 have been amended. Claims 22-31 have been canceled. Claims 32-35 have been added. Claims 1-21 and 32-35 are pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

1. Confirmation of Election

Applicant hereby confirms the election of Group I, claims 1-21 for Examination. Non-elected claims 22-31 have been canceled without disclaimer or prejudice. Applicant reserves the right to file a divisional application for the subject matter of these claims at a later date.

2. Rejection Under §112, Second Paragraph

Claims 20 and 21 stand rejected under 35 U.S.C. §112, ¶2. Claim 20 has been amended to correct typographical errors in the claim. Specifically, the following amendment was made: “a strip of a synthetic resin film extending along ~~an~~ said upper edge of said first side wall of the bag, wherein said strip protrudes well above said upper edge of first side wall to form an extension ~~preventing~~ of said upper edge of said first side wall that presents an engagement surface for suction cups of the bag filling equipment, wherein said upper edge of said second side wall extends above an upper edge of said reinforcing strip.”

Support for this amendment can be found in the application on page 9, lines 6-10. In claim 20, “*an* upper edge of said first side wall” was replaced with “*said* upper edge of said first

side wall” because antecedent basis for this term is already provided in paragraph (A). It is believed that these amendments in no way narrow the scope of the claims and are for clarification purposes only. Claim 21 depends from claim 20 and is believed not to have any additional indefiniteness problems of its own.

In addition, claim 1 has been amended to delete an extraneous limitation.

In light of the amendments and the foregoing arguments, withdrawal of this rejection is requested.

3. Rejections Based on the Prior Art

a. Recapitulation of the Invention¹

The invention relates to a composite bag such as a so-called “half and half” bag having a first side wall formed at least in part from a synthetic resin mesh material and a second side formed from a synthetic resin film material. A reinforcing strip extends horizontally along the upper end portion of the mesh side wall of the bag. The reinforcing strip overlaps the upper edge of the first side wall such that it is joined to the first side wall through a horizontal seam positioned well beneath the top edge of the reinforcing strip to form an extension that protrudes well above (e.g., 1/2 inch to 1-1/2 inches or even considerably more, such as several inches or more) the upper edge of the mesh side wall. In order to strengthen the seam at the sides of the bag, the side edges of the reinforcing strip are joined to the second, film side wall along at least

¹ This Section 3a is intended to provide the Examiner with some background information on the state of the art and applicant's contribution to it. It is *not* intended to distinguish specific claims from the prior art. That task is performed in Section 3b below.

most of the vertical extent of the extension. This film-to-film bond is considerably stronger than a bond through an intermediate mesh layer, as occurs along the remainder of the side seams of the bag. In addition, the relatively long extension provides an improved contact point for suction cups or other equipment used on automated bag filling equipment to open a bag during a bag filling process.

b. Rejection of Claims 1-21 Under §103

Claims 1-21 stand rejected under § 103 as being obvious over various combinations of Huertas, Spanish publication number 1,033,033 (Huertas) in view of Fox et al., U.S. Patent No. 6,024,489 (Fox), and further in view of any one of Shigeru Japanese Publication No. 2000-142712 (Shigeru), Christensen U.S. Patent No. 3,506,185 (Christensen) or Bell U.S. Patent No. 5,882,120 (Bell). These rejections are respectfully traversed.

i. Claim 1

Independent claim 1 recites a synthetic resin bag for use with automatic bag filling equipment. The bag includes first and second side walls joined along two side edge portions and a bottom edge portion to form the bag. The first side wall is formed from a synthetic resin mesh material, and the second side wall is formed from a synthetic resin film material. Claim 1 requires “a reinforcing strip of a synthetic resin film extending along an upper edge of said first side wall of said bag.” Claim 1 further requires side edges of the reinforcing strip to be “joined

to said second side wall along seams extending at least a majority of the width of said extension.”

Huertas discloses bags made of two continuous bands, one of closed plastic (1) and one of mesh (2). A strip of plastic (3) is attached to the mesh (2) at its upper edge, so that the strip (3) and film band (1) are continuous as can be seen in Figure 4. The continuous bands (1) and (2) are overlapped. Bags are then formed from the overlapped bands by:

- (A) sealing their bottom edges together at a longitudinal seam or “line of bonding (7)”;
- (B) perforating the bands at regular intervals to form a series of transversal perforated lines and welding the strips along corresponding lines of welding (6) that overlie the perforated lines (5); and
- (C) tearing the welded bands (1) and (2) along the perforated lines (5) to form discreet bags whose side edges are formed by lines of perforation in bonded bands (1) and (2). However, the side edges of plastic strip (3) are *not* joined to the band of plastic (1) above the mesh as is required by claim 1. The seams (6) instead stop at the top of the mesh band (2). The extended film-to-film seal of the present invention therefore is lacking in Huertas.

The Examiner has recognized the above-identified in Huertas. However, contrary to the Examiner’s assertion, the references cited in the Office Action, i.e., Fox, Shigeru, Christensen, and Bell, cannot cure that deficiency.

In Fox, a bag B is formed from a mesh side wall 10 and a film side wall 12. (col. 2, lines 58-66). Side walls 10 and 12 are bonded or sealed to each other along vertically extending side seams as indicated at 14 and 16. (col. 3, lines 33-35). A reinforcing strip 32 of a suitable

synthetic resin film is bonded or sealed, as indicated at 34 across a laterally extending seam at an upwardly extending portion 36 of the mesh material of the first side wall 10. (col. 4, lines 22-25). However, as can be seen from Figures 4A-4C, because the reinforcing strip 32 extends above the second side wall 12 and the second side wall 12 does not extend above the mesh portion of the first side wall 10, the side edges of reinforcing strip 32 are *not* joined to the second side wall 12 along seams extending at least a majority of the width of the reinforcing strip 32, as claim 1 requires.

Shigeru discloses a net bag 1 in which nearly the entire bag beneath the top seam is formed from a net material 4. Film strips 2 are attached to the net material 1 on *both sides* of the bag to form a chuck 3 via which the bag can be opened and resealed – much the same is in Ziploc® bags. Because the bag lacks opposed film and mesh walls, it is not a composite bag of the claimed type. The problems associated with composite bags, including the problem of establishing film-to-mesh bonds in such bags, therefore is not present in Shigeru. On the other hand, Huertas has no need for a chuck, which is the feature of primary focus of the Shigeru bag. Thus, the teachings of Shigeru are not applicable to those of Huertas.

Furthermore, even if the references were combined, the invention would not result. In Shigeru, a surface sheet 2 is located at an opening part of the net bag 1 to adhere wires of the net bag 1 to the surface. (Abstract). Because the Shigeru net bag 1 has *both* of its sides made from mesh and a surface sheet 2 above both mesh sides, the side edges of its surface sheets 2 are not joined to a bag side wall made of film material along seams extending at least a majority of the width of the surface sheets 2, as claim 1 requires.

Christensen discloses a bag having sides 2, 3 that are made from *polythene foil*. Thus, it also is *not* a composite mesh/film bag. Therefore, the teachings of Christensen are not applicable to those of Huertas. Nevertheless, even if the references were combined, the invention would not result. At the top of the Christensen bag, the thin polythene foil of the mouth is reinforced by means of two reinforcement ribbons 6, 7 of polythene foil, each of which has a thickness that is greater than the thickness of the foil of sides 2, 3. The sides 2, 3 of the bag are joined along one continuous vertical weld 11 and 12. (col. 3, lines 9-37). However, the reinforcing ribbons do not extend above the foil sides and, therefore, appear not to be welded to one *another* or even directly to the foil on the opposite side of the bag. As such, the side edges of reinforcement ribbons 6, 7 of Christensen could not possibly suggest joining a reinforcement strip on one side of a bag directly to the opposite side wall of the bag as claim 1 requires.

Bell discloses a bag 1 that includes first and second, opposed side walls, panel sections or panels 4 and 5, and base or bottom gusset or gusset member 8 having holes 9 therein. However, as in Shigeru and Christensen, and unlike in the present invention, the panels 4 and 5 are *not* made of different materials. Thus, the bag construction 1 is *not* a composite bag. Thus, the teachings of Bell are not applicable to those of Huertas. Nevertheless, even if the references were combined, the invention would not result. The bag 1 of Bell includes an open, bottom end 12 and a closed, top end 11 having a flap 15 thereon with a handle aperture 16 therein. (col. 4, lines 36-48). As can be seen from Figure 4, both panels 4 and 5 include a flap 15 thereon, and the flaps 15 are attached to each other. Therefore, a reinforcement strip on one side of the bag is not joined *directly* to the other side of the bag, as claim 1 requires.

Hence, none of Fox, Shigeru, Christensen, and Bell, can cure the basic deficiency in the teachings of Huertas because they, like Huertas, all lack (1) a composite film/mesh bag having (2) a reinforcing strip on the mesh side of the bag that (3) extends above the mesh material and (4) is joined to the film side wall (as opposed to another extension) as claim 1 requires. Claim 1, which recites a composite bag having improved seam strength when compared to earlier composite bags, is neither disclosed nor suggested by the prior art relied upon in the rejection. Claim 1 therefore believed to be non-obvious over the cited prior art. Withdrawal of the rejection of claim 1 and allowance are believed to be in order and are respectfully requested.

Dependent claims 2-14 are believed to be in condition for allowance for incorporating by reference the limitations of claim 1 and for defining additional features of the invention, which, when considered in combination with those of claim 1, are neither disclosed nor suggested by the prior art relied upon in the rejection.

ii. Claim 15

Independent claim 15 recites a synthetic resin bag for use with wicket pins of automatic bag filling equipment. Claim 15 requires “first and second side walls joined along two side edge portions and a bottom edge portion to form said bag, said first side wall being formed from a synthetic resin fiber mesh material, and said second side wall being formed from a synthetic resin film material.” Claim 15 also requires “a reinforcing strip of a synthetic resin film extending along an upper edge of an exterior surface of said first side wall.” Notably, claim 15 additionally requires “*said side edges of said reinforcing strip are thermally bonded directly to*

said second side wall along seams extending at least a majority of a width of said extension.”

As should be apparent from the above discussion, the references of record do not teach or suggest a bag that has a reinforcing strip with side edges that are thermally bonded directly to a second side wall along seams extending at least a majority of a width of the extension.

Dependent claims 16-19 are believed to be in condition for allowance for incorporating by reference the limitations of claim 15 and for defining additional features of the invention, which, when considered in combination with those of claim 15, are neither disclosed nor suggested by the prior art relied upon in the rejection.

iii. Claim 20

Independent claim 20 recites a synthetic resin bag for use with wicketed automatic bag filling equipment. Claim 20 requires the “first and second side walls joined along two side edge portions and a bottom edge portion to form said bag, said first side wall being formed from a synthetic resin mesh material.” Claim 20 additionally requires “said second side wall being formed from a synthetic resin film material” and “an upper edge of said second side wall extending above an upper edge of said first side wall.” Claim 20 as amended also requires “a strip of a synthetic resin film extending along ~~an~~ said upper edge of said first side wall of the bag, wherein said strip protrudes well above said upper edge of first side wall to form an extension ~~preventing~~ of said upper edge of said first side wall that presents an engagement surface for suction cups of the bag filling equipment.” Claim 20 has been amended to require

“wherein said upper edge of said second side wall protrudes above said upper edge of said reinforcing strip.”

In Huertas, the plastic band (1) has an upper edge that does *not* extend above an upper edge of the strip of plastic (3), which is attached to the mesh band (2) at its upper edge, as can be seen in Fig. 4. Hence, the bag of Huertas does not teach or suggest the bag of claim 20, which requires “wherein said upper edge of said second side wall extends above said upper edge of said reinforcing strip.” The remaining references cannot cure this deficiency in the teachings of Huertas because none disclose a composite film/mesh bag having a film sidewall extending above an extension of the mesh sidewall. Instead, Shigeru, Christiansen, and Bell all disclose bags having coterminous upper sidewall edges. Fox actually teaches strongly *away* from the invention by disclosing a half and half bag in which the upper edge of the film side wall 12 is positioned well *beneath* the upper edge of the reinforcing strip 32 on the mesh sidewall 10.

4. New Claims and Conclusions

New dependent claims 32-35 have been added and are believed to be in condition for allowance for incorporating by reference the limitations of a base claim believed to be in condition for allowance and for defining additional features of the invention, which, when considered in combination with those of the corresponding base claim, are neither disclosed nor suggested by the prior art relied upon in the rejection. For example, claims 32 and 34 depend from claims 1 and 15, respectively and further require that the second, side wall have an upper edge that extends above the upper edge of the reinforcing strip on the first, mesh side wall. As

should be apparent from the discussion of claim 20, this feature is neither taught nor suggested by the references of record. Claims 33 and 35 further require “wherein said wicket holes are formed in said second side wall above said top edge of said reinforcing strip.” This feature is also neither taught nor suggested by the references of record.

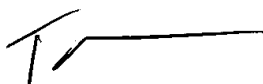
It is submitted that original claims 1-21 are in compliance with 35 U.S.C. §§ 112 and 103 and each define patentable subject matter. New claims 32-35 are also believed to be in condition for allowance. A Notice of Allowance is therefore respectfully requested.

Applicant requests a one-month extension of time from April 7, 2003 to May 7, 2003 in which to respond to the Office Action mailed January 7, 2003. Enclosed is a check in the amount of \$55 in payment of the fee under 37 CFR 1.17(a)(1) by a small entity. No other fee is believed to be payable with this communication. Nevertheless, should the Examiner consider any fees to be payable in conjunction with this or any future communication, the Commissioner is authorized to direct payment of such fees, or credit any overpayment to Deposit Account No. 50-1170.

U.S. Serial No. 09/835,933 – Hefner
Group Art Unit 3727 – Attorney Docket 81.010
Page 19

The Examiner is invited to contact the undersigned by telephone if it would help expedite matters.

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